

# Agenda



- Overview
- Tailings
  - Annual Report Summary
  - Tailings FMWP Summary
- Site 23
  - Annual Report Summary
  - 920 FMWP Summary
- Biomonitoring Report Summary
- Discussions
  - FWMP proposed changes
  - Financial assurance meeting plans
  - Tour Wednesday

#### Overview

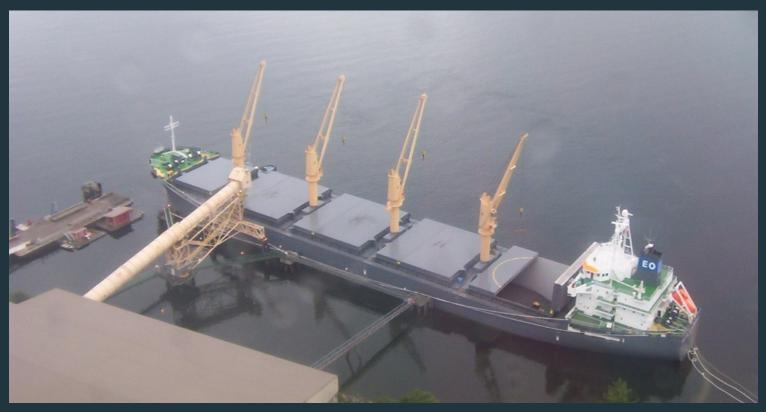


- Production statistics
- Exploration statistics
- Spills and releases
- Disturbances and water usage
- Construction activities
- 2009 planned projects
- Reclamation activities
- Closure studies

#### **2008 Production Statistics**



- Tons mined per day: 2,021
- Tons milled per day: 2,007
- Shipments of concentrate: 13 (157,436 tons)



### **Exploration Activities**



- 2008 Activities
  - Drilled 14 holes (17,450 ft)
  - All pads were in immediate mine area
    - Big Sore, Gallagher, Bruin Creeks
  - Continued same environmental controls as developed in the 2004-2005 drill seasons
- 2009 Plans
  - Road accessible sites only; 2 sites planned at 920

## Disturbances and Water Usage



- Tailings Area Northwest Expansion cleared to approximately 14 acres
- Up to 700 gpm Greens Creek withdrawal (creek flow dependent) for mine and mill use
- Variable Cannery Creek withdrawal for truck wash, camp and port uses

# 2008 Spills and Releases



| Date     | Location                 | Quantity<br>spilled (gal) | Spilled material          | Description of Incident   |
|----------|--------------------------|---------------------------|---------------------------|---|
| 2/1/08   | warehouse                | 300                       | 50 % hydrogen<br>peroxide | hard plastic bladder on inner tote started spilling from a ruptured opening above the valve during forklift transport   |
| 2/27/08  | HI water<br>building pad | 25-50                     |                           | ISO container hose valve was left partially open causing fuel to drip onto ground. Spill likely began at 0100 hours on 2/27 and was not discovered until 1430 on the 27th.        |
| 3/19/08  | ug shop                  | 350                       | hydraulic oil             | mechanic was moving hydraulic oil tote and<br>bumped another oil tote valve, breaking off the<br>bottom of the tote. The tote emptied into the<br>containment area at the ug shop |
| 5/20/08  | lab pipeline to mill     | 100                       | low pH lab water          | pipeline had likely frozen in winter and cracked; thawed and began to drip  |
| 6/26/08  | warehouse                | 250                       | concrete admixilire       | during transport, tote was compromised by forklift  |
| 9/28/08  | warehouse                | 45                        |                           | drum was compromised while moving it out of a connex container  |
| 10/14/08 | ug paste plant           | 100                       | hydraulic oil             | build up on pump caused powerpack in pump<br>to fail  |
| 10/23/08 | ug paste plant           | 100                       | hydraulic oil             | fitting wasn't secure on pump after maintenance work  |
| 12/30/08 | outside<br>powerhouse    | 305                       | GIVCOL                    | forklift tire slipped on ice and tote fell off of forklift and top broke off  |

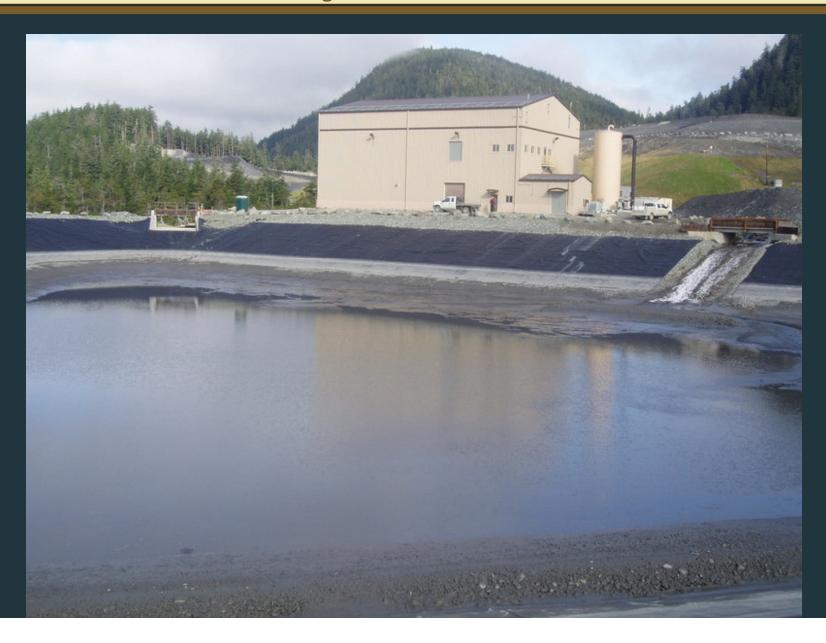
#### 2008 Construction Activities



- Commissioning of Pond 7 water treatment facility
- Decommissioning of Pit 5 water treatment facility
- Decommissioning of Pond 6
- Installation of 18" HDPE stormwater pipeline
  - replacement of production rock bedding materials
- Extension of liner system at tails
- Construction of interim storage facility at Site 23 (25,000 cy capacity)

# Pond 7 Water Treatment Facility July 2008





# Tailings Facility – Pit 5 Area July 2008





# Site 23 Interim Storage Pad June 2008





## 2009 Planned Projects



- Continuation of Pond 6 area expansion
- 1.4 mile A road sand pit expansion
- Divert clean water away from Pond C
- Batch plant drainage improvements
- Cons building roof work
- Greens Creek water intake screen replacement
  - Completed late winter

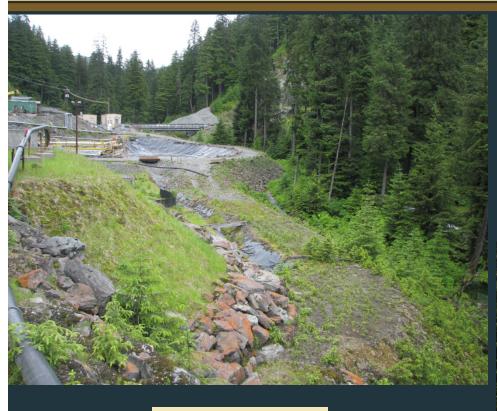
#### **Reclamation Activities**



- 2008 completed production rock removal
  - B pond berm removal: 2600 cy
  - 1350: 4220 cy
  - B road pipeline bedding: 30,000 cy
- 2009 planned production rock removal
  - Site E (15-20 %)
  - Pond D berm
  - 1.8 Mile
  - Site 1350

### **B Pond Berm Removal**





before



after

#### **Closure Studies**



- Ongoing Closure Studies
  - Soil cover-forest hydrology study
  - Sulfate reduction monitoring program (SRMP)
  - Underground hydrology study

# **Underground Hydrology Study**



- Key aspects of the study
  - Current water table and hydrologic characteristics
  - Characterize geochemistry of underground waters
  - Develop water balance for the mine system
  - Estimate the stored soluble load
  - Model natural and manual flooding scenarios
  - Predict post-closure flow rates and drainage compositions
  - Evaluate potential active and passive treatment options for mine waters

HGCMC anticipates receiving an interim report in 2009